

What Is Claimed Is:

- 1 1. A method for treatment and post-
2 treatment of the stenosed region of an artery
3 comprising the steps of:
4 reducing the annular stenosed area within an
5 artery; and
6 applying a radioactive dose to the area of
7 reduced stenosis.
 - 1 2. A method as defined in Claim 1 wherein
2 the step of applying the radioactive dose is sufficient
3 to affect smooth muscle cells within the area of
4 reduced stenosis to inhibit rapid growth of such cells,
5 thereby preventing restenosis of the artery.
 - 1 3. A method as defined in Claim 1 further
2 including the step of continuing to reduce the annular
3 stenosed area while applying a radioactive dose to said
4 area.
 - 1 4. A method as defined in Claim 1 including
2 the step of allowing blood flow through the area of
3 reduced stenosis while applying the radioactive dose.
 - 1 5. A method as defined in Claim 1 including
2 the contacting of the tissue of the area of reduced
3 stenosis with a radioactive material.
 - 1 6. A method as defined in Claim 1 further
2 including the step of containing a source of
3 radioactive dose before and after exposure to said area
4 of reduced stenosis.
 - 1 7. A method for treatment and post-
2 treatment of the stenosed region of an artery after
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3 reduction of said region by angioplasty or other means
4 comprising the step of applying a radioactive dose to
5 said reduced region of the artery.

1 8. A method as defined in Claim 1 wherein
2 the step of applying the radioactive dose is sufficient
3 to affect smooth muscle cells within the area of
4 reduced stenosis, thereby inhibiting rapid growth of
5 such cells and preventing restenosis of the artery.

1 9. Apparatus for post-treatment of a
2 stenosed region of an artery that has been reduced by
3 angioplasty or other means comprising:
4 radioactive dose means; and
5 positioning means operatively connected to
6 said dose means to position said dose means within the
7 stenosed region of an artery that has been reduced by
8 angioplasty or other means.

1 10. Apparatus as in Claim 9 wherein the
2 positioning means includes a retractable sheath which
3 may be removably positioned over said radioactive dose
4 means.

1 11. Apparatus as in Claim 9 wherein the
2 positioning means further includes an angioplasty
3 balloon and said radioactive dose means is connected to
4 said balloon and is positioned in the stenosed region
5 by expansion of said balloon.

1 12. Apparatus as in Claim 9 wherein the
2 positioning means includes a stent and said radioactive
3 dose means is associated with said stent.

